

REMARKS

The Decision on Appeal dated July 20, 2004 has been carefully reviewed and the foregoing amendment and following remarks are made in consequence thereof.

Claims 1-6 and 8-20 are pending in this application. Claims 1-6 and 8-20 stand rejected. Claim 7 has been cancelled.

The rejection of Claims 1-4, 6, 8-11, and 15-17 under 35 U.S.C. § 103 as being as being unpatentable over Schilling et al. in view of Horner et al. or Borkowicz et al. is respectfully traversed.

Schilling et al. describe a multiple annular combustion apparatus 25. Combustor apparatus 25 includes a domed end 35 that includes a plurality of domes 37, 39, and 41. Each dome 37, 39, and 41 includes a plurality of spaced openings that receive mixers for mixing air and fuel prior to entry into a common combustion chamber 29.

Joshi et al., which is incorporated by reference into Schilling et al., describe a dual fuel mixer 24 for use with a single domed combustor 10. Mixer 24 includes a swirl cup 22 and inner and outer swirlers 26 and 28, respectively. Mixer 24 is in flow communication with gas fuel passages 38 and a liquid fuel manifold 40. Swirlers 26 and 28, and gas fuel manifold 35 and liquid fuel manifold 40 are sized to permit a lean premixture at exit plane 43 of mixer 24. Joshi et al. also describe that a centerbody 49 in mixer 24 includes a passage 51 therethrough in order to admit air of a relatively high axial velocity into combustion chamber 14 adjacent centerbody tip 50.

Horner et al. describe a continuous-burning combustor 10 for use with a gas turbine engine. Combustor 10 includes a single dome assembly 22 that includes a swirl cup 28, a dome plate 32, and a swirler 38. Swirler 38 receives a fuel nozzle 26 therethrough that supplies fuel and water to a combustion chamber 14 defined within combustor 10. Notably, Horner et al. describe supplying a fuel/water mixture together through fuel nozzle 26 to combustor dome assembly 22 and to combustion chamber 14.

Borkowicz et al. describe a gas turbine 10 including a plurality of combustors 14 that extend circumferentially within gas turbine 10. Each combustor 14 includes a single dome, a combustion chamber 70, and a plurality of fuel nozzles 32 that are arranged about a longitudinal axis of combustor 14. Each combustor fuel chamber 70 is downstream and in flow communication with the dome. Each fuel nozzle 32 includes a premix passage 60 and a diffusion passage 74. Premix passage 60 is in flow communication with a plurality of premix fuel distribution tubes 66. Notably, Borkowicz et al. describe a water passage 94 that extends concentrically and radially outward of tube 96 that carries liquid fuel through fuel nozzle assembly 32 to a discharge orifice 104 in the center of the nozzle.

Claim 1 recites a method for operating a gas turbine combustor of a gas turbine engine using a water delivery system wherein the combustor includes a plurality of domes and the water delivery system is connected to the gas turbine engine wherein the method includes “supplying at least one combustor dome with a fuel/air mixture equivalence ratio less than one...supplying at least one of water and steam into the gas turbine engine with the water delivery system such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody.”

To the extent understood, none of Schilling et al., Horner et al., Borkowicz et al., nor Joshi et al., considered alone or in combination, describe nor suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, none of Schilling et al., Horner et al., Borkowicz et al., or Joshi et al., considered alone or in combination, describe or suggest a method for operating a gas turbine combustor using a water delivery system, wherein the combustor includes a plurality of domes, and the water delivery system is connected to the gas turbine engine, in combination with method steps of supplying at least one combustor dome with a fuel/air mixture equivalence ratio less than one and supplying at least one of water and steam into the gas turbine engine with the water delivery system such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Moreover, none of Schilling et al., Joshi et al., Horner et al., nor Borkowicz et al., considered alone or in combination, describe

or suggest supplying at least one of water and steam into the gas turbine engine with the water delivery system such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Rather, in contrast to the present invention, Shilling et al. describe a combustor that includes premixers, Joshi et al. specifically describe a combustor that includes swirlers and fuel manifolds that are sized to discharge a predetermined lean premixture into the combustor, Horner et al. describe a combustor that includes swirlers that receive a fuel nozzle therethrough that discharges fuel and water to the combustor, and Borkowicz et al. describe a fuel nozzle that includes a water passage that is radially outward of a concentric liquid fuel tube that carries liquid fuel through the fuel nozzle. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Schilling et al. in view of Horner et al. or Borkowicz et al.

Notwithstanding the above, none of the cited art, considered alone or in combination describe or suggest all the elements of the claimed combination. Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Schilling et al. according to the teachings of either Horner et al. or Borkowicz et al., and also using the teachings of Joshi et al. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Schilling et al., Horner et al., or Borkowicz et al., considered alone or in combination describe or suggest the claimed combination, and Applicants respectfully submit that it would not be obvious to combine Schilling et al. with either Horner et al. or Borkowicz et al. because there is no motivation or suggestion within the prior art to combine the references. Although Schilling et al. and Joshi et al. describe premixing fuel and air and also describe premixing fuel and air at an equivalence ratio less than one, neither Schilling et al. nor Joshi et al. describe or suggest that premixing fuel and air at an equivalence ratio less than one may be used together with water and/or steam injection into a combustor. Rather, at column 1, lines 47-49, Joshi et al. recite that "flame stability and engine operability dominate combustor design requirements." Applicants respectfully submit it is not obvious to combine techniques, such as operating a combustor with an equivalence ratio that is less than one and injecting steam/water into the combustor,

as both techniques have a tendency to reduce flame stability, especially in light of the fact within the cited prior art that “flame stability and engine operability dominate combustor design requirements.”

Moreover, Horner et al. describe supplying a fuel and water mixture to the fuel nozzle, in contrast to the claimed fuel/air mixture and Borkowicz et al. describe a fuel nozzle that includes a plurality of concentric passages wherein the center passage carries a liquid fuel to a nozzle orifice, which is in contrast to Claim 1 wherein at least one of atomized water and steam is injected into the combustor through a center orifice in a fuel/air premixer centerbody within the combustor. Further, neither Horner et al. nor Borkowicz et al. describe or suggest that the operation of premixing fuel and air at an equivalence ratio less than one may be used in combination with water and/or steam injection into a combustor. Rather, Horner et al. describes a fuel nozzle that supplies both fuel and water to the combustor and Borkowicz describes a fuel nozzle that injects water through a passage that is concentrically aligned with respect to a diffusion fuel passage, a liquid fuel passage, and a combustion air passage. Borkowicz states at column 2, lines 12-17, that “the combustor must be able to operate in a stable manner over a wide range of gas turbine cycle conditions.” Accordingly, Applicants respectfully submit it is not obvious to combine techniques which each have a tendency to reduce flame stability when the cited prior art states that the combustor must be able to operate in a stable manner over a wide range of gas turbine cycle conditions.

Accordingly, Applicants respectfully submit that the prior art teaches away from the present invention and from each other. More specifically, Schilling et al. and Joshi et al. describe premixing fuel and air and Joshi et al. describes operating with an equivalence ratio less than one, which, by itself, tends to reduce flame stability. Moreover, Borkowicz et al. and Horner et al. each describe combustors that may utilize water injection, which, by itself, tends to reduce flame stability. Because each of Schilling et al. and Joshi et al., and Borkowicz et al. and Horner et al. describe using emission lowering techniques that each have a tendency to reduce flame stability, and because flame stability and engine operability dominate combustor design requirements, and because the combustor must be able to operate in a stable manner over a wide range of gas turbine cycle conditions, Applicants respectfully submit that Schilling et al. and Joshi et al. teach away from Borkowicz et al. and Horner et al.

The present Section 103 rejection appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically,

Schilling et al. is cited for its teaching of a multi-domed combustor including premixers, Joshi et al. describe an equivalence ratio less than one, and Borkowicz et al. and Horner et al. are each cited for their teaching of using water/steam injection in a premixer of a gas turbine combustor. The contradictory teachings between the cited art would seem to indicate that one skilled in the art would not have combined the cited art to arrive at the present claimed invention because the prior art warns of the possibility of affecting flame stability using each of the techniques. Moreover, Applicants respectfully submit that one skilled in the art would not have combined the cited art but instead, would have avoided combining separate techniques that may adversely affect flame stability. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Schilling et al. in view of Horner et al. or Borkowicz et al.

Claims 2-4 depend from independent Claim 1. When the recitations of Claims 2-4 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-4 likewise are patentable over Schilling et al. in view of Horner et al. or Borkowicz et al.

Claim 6 recites a combustor system for a gas turbine engine, wherein the combustor system comprises "a combustor comprising a plurality of domes, at least one of said combustor domes configured to operate with a fuel/air mixture equivalence ratio less than one...a water delivery sub-system connected to the gas turbine engine and configured to supply at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody." None of Schilling et al., Horner et al., Borkowicz et al., or Joshi et al., considered alone or in combination, describe nor suggest a combustor system for a gas turbine engine, wherein the combustor system includes a combustor including a plurality of domes, wherein at least one of the combustor domes is configured to operate with a fuel/air mixture equivalence ratio less than one, in combination a water delivery sub-system connected to the gas turbine engine and configured to supply at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Specifically, none of Schilling et al., Horner et al., nor Borkowicz et al., considered alone or in combination, describe or suggest a combustor system for a gas turbine

engine including a water delivery sub-system connected to the gas turbine engine and configured to supply at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Accordingly, Applicants respectfully submit that Claim 6 is patentable over Schilling et al. in view of Horner et al. or Borkowicz et al.

Claims 8-11 depend from independent Claim 6. When the recitations of Claims 8-11 are considered in combination with the recitations of Claim 6, Applicants submit that dependent Claims 8-11 likewise are patentable over Schilling et al. in view of Horner et al. or Borkowicz et al.

Claims 15-17 depend from Claim 14 which recites a gas turbine engine comprising a combustor system comprising a combustor and a water delivery sub-system...said combustor being a lean premix combustor comprising a plurality of domes...at least one of said domes configured to operate with a fuel/air mixture equivalence ratio less than one...said water delivery sub-system configured to supply at least one of water and steam to the gas turbine engine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody.” None of Schilling et al., Horner et al., Borkowicz et al., or Joshi et al., considered alone or in combination, describe nor suggest a gas turbine engine including a combustor system including a combustor that includes a combustor and a water delivery sub-system, wherein the combustor includes a plurality of domes such that at least one of the domes is configured to operate with a fuel/air mixture equivalence ratio less than one, in combination with a water delivery sub-system configured to supply at least one of water and steam to the gas turbine engine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Specifically, none of Schilling et al., Horner et al., nor Borkowicz et al., considered alone or in combination, describe or suggest operating a combustor wherein at least one of atomized water and steam is injected into the combustor through a center orifice in a fuel/air premixer centerbody within the combustor. Accordingly,

Applicants respectfully submit that Claim 14 is patentable over Schilling et al. in view of Horner et al. or Borkowicz et al.

Claims 15-17 depend from independent Claim 14. When the recitations of Claims 15-17 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15-17 likewise are patentable over Schilling et al. in view of Horner et al. or Borkowicz et al., and further in view of Joshi et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-4, 6, 8-11, and 15-17 be withdrawn.

The rejection of Claims 5, 12-14, and 18-20 under 35 U.S.C. § 103 as being unpatentable over Schilling et al. in view of either Horner et al. or Borkowicz et al., and further in view of Talabisco et al. or Maslak is respectfully traversed.

Schilling et al., Horner et al., and Borkowicz et al. are described above. Talabisco et al. describe a method and apparatus for maintaining a constant level of NO_x and minimizing CO emissions from a gas turbine. The turbine includes a compressor 12 and a combustor 14. Fuel, air, and steam is injected into combustor 14 based on a load of the turbine.

Maslak describes water and steam injection in a cogeneration system 10. System 10 includes a gas turbine 11 including a compressor 12 and a combustor 18. Water and steam are injected based on gas turbine power output.

Claim 1 recites a method for operating a gas turbine combustor of a gas turbine engine using a water delivery system wherein the combustor includes a plurality of domes and the water delivery system is connected to the gas turbine engine wherein the method includes “supplying at least one combustor dome with a fuel/air mixture equivalence ratio less than one...supplying at least one of water and steam into the gas turbine engine with the water delivery system such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody.”

To the extent understood, none of Schilling et al., Horner et al., Borkowicz et al., Talabisco et al. nor Maslak, considered alone or in combination, describe nor suggest the

claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, none of Schilling et al., Horner et al., Borkowicz et al., Talabisco et al. nor Maslak, considered alone or in combination, describe or suggest a method for operating a gas turbine combustor using a water delivery system, wherein the combustor includes a plurality of domes, and the water delivery system is connected to the gas turbine engine, in combination with method steps of supplying at least one combustor dome with a fuel/air mixture equivalence ratio less than one and supplying at least one of water and steam into the gas turbine engine with the water delivery system such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Moreover, none of Schilling et al., Horner et al., Borkowicz et al., Talabisco et al. nor Maslak, considered alone or in combination, describe or suggest supplying at least one of water and steam into the gas turbine engine with the water delivery system such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Rather, in contrast to the present invention, Shilling et al. describe a combustor that includes premixers, Horner et al. describe a combustor that includes swirlers that receive a fuel nozzle therethrough that discharges fuel and water to the combustor, and Borkowicz describe a fuel nozzle that includes a water passage that is radially outward of a concentric liquid fuel tube that carries liquid fuel through the fuel nozzle, Talabisco et al. describes a system for automatically adjusting input steam flow rate based on a load of the turbine, and Maslak describes a control system that injects water and steam into a gas turbine based on gas turbine power output. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Schilling et al. in view of either Horner et al. or Borkowicz et al., and further in view of Talabisco et al. or Maslak.

Notwithstanding the above, none of the cited art, considered alone or in combination describe or suggest all the elements of the claimed combination. Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Schilling et al. according to the teachings of either Horner et al. or Borkowicz et al., and also using the teachings of Talabisco et al. or Maslak.

More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Schilling et al. in view of either Horner et al. or Borkowicz et al., and further in view of Talabisco et al. or Maslak, considered alone or in combination describe or suggest the claimed combination, and Applicants respectfully submit that it would not be obvious to combine Schilling et al. with either Horner et al. or Borkowicz et al. and Talabisco et al. or Maslak because there is no motivation or suggestion within the prior art to combine the references. Although Schilling et al. describe premixing fuel and air, Schilling et al. do not describe or suggest that premixing fuel and air at an equivalence ratio less than one may be used together with water and/or steam injection into a combustor. Rather, Joshi et al., which is incorporated into Schilling et al. by reference, at column 1, lines 47-49 recite that “flame stability and engine operability dominate combustor design requirements.” Applicants respectfully submit it is not obvious to combine techniques, such as operating a combustor with an equivalence ratio that is less than one and injecting steam/water into the combustor, as both techniques each have a tendency to reduce flame stability, especially in light of the fact stated within the cited prior art that “flame stability and engine operability dominate combustor design requirements.”

Moreover, Horner et al. describe supplying a fuel and water mixture to the fuel nozzle, in contrast to the claimed fuel/air mixture and Borkowicz et al. describe a fuel nozzle that includes a plurality of concentric passages wherein the center passage carries a liquid fuel to a nozzle orifice, which is in contrast to Claim 1 wherein at least one of atomized water and steam is injected into the combustor through a center orifice in a fuel/air premixer centerbody within the combustor. Moreover, neither Horner et al. nor Borkowicz et al. describe or suggest that the operation of premixing fuel and air at an equivalence ratio less than one may be used in combination with water and/or steam injection into a combustor. Rather, Horner et al. describes a fuel nozzle that supplies both fuel and water to the combustor and Borkowicz describes a fuel nozzle that injects water through a passage that is concentrically aligned with respect to a diffusion fuel passage, a liquid fuel passage, and a combustion air passage. Borkowicz states at column 2, lines 12-17, that “the combustor must be able to operate in a stable manner over a wide range of gas turbine cycle conditions.” Accordingly, Applicants respectfully submit it is not obvious to combine techniques which each have a tendency to reduce flame stability when the cited prior art states that the

combustor must be able to operate in a stable manner over a wide range of gas turbine cycle conditions.

Accordingly, Applicants respectfully submit that the prior art teaches away from the present invention and from each other. More specifically, Schilling et al. and Joshi et al. describe premixing fuel and air and Joshi et al. describes operating with an equivalence ratio less than one, which, by itself, tends to reduce flame stability. Moreover, Borkowicz et al. and Horner et al. each describe combustors that may utilize water injection, which, by itself, tends to reduce flame stability. Talabisco et al. and Maslak are merely cited for varying an amount of steam/water injection based on turbine load. Because each of Schilling et al. and Joshi et al., and Borkowicz et al. and Horner et al. describe using emission lowering techniques that each have a tendency to reduce flame stability, and because flame stability and engine operability dominate combustor design requirements, and because the combustor must be able to operate in a stable manner over a wide range of gas turbine cycle conditions, Applicants respectfully submit that Schilling et al. and Joshi et al. teach away from Borkowicz et al. and Horner et al. Combining two techniques that each tend to reduce flame stability when the cited prior art states that flame stability dominates combustor design is simply not an obvious combination.

The present Section 103 rejection appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Schilling et al. is cited for its teaching of a multi-domed combustor including premixers, Joshi et al. describe an equivalence ratio less than one, and Borkowicz et al. and Horner et al. are each cited for their teaching of using water/steam injection in a premixer of a gas turbine combustor. Talabisco et al. and Maslak are merely cited for varying an amount of steam/water injection based on turbine load. The contradictory teachings between the cited art would seem to indicate that one skilled in the art would not have combined the cited art to arrive at the present claimed invention because the prior art warns of the possibility of affecting flame stability using each of the techniques. Moreover Applicants respectfully submit that one skilled in the art would not have combined the cited art, but instead would have avoided combining separate techniques that may adversely affect flame stability. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Schilling et al. in view of Horner et al. or Borkowicz et al, and further in view of Talabisco et al. or Maslak.

Claim 5 depends from independent Claim 1. When the recitations of Claim 5 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 5 likewise is patentable over Schilling et al. in view of Horner et al. or Borkowicz et al., and further in view of Talabisco et al. or Maslak.

Claims 12 and 13 depend from Claim 6 which recites a combustor system for a gas turbine engine, wherein the combustor system comprises "a combustor comprising a plurality of domes, at least one of said combustor domes configured to operate with a fuel/air mixture equivalence ratio less than one...a water delivery sub-system connected to the gas turbine engine and configured to supply at least one of water and steam to the gas turbine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. None of Schilling et al., Horner et al., Borkowicz et al., or Talabisco et al. or Maslak, considered alone or in combination, describe nor suggest a combustor system for a gas turbine engine, wherein the combustor system includes a combustor including a plurality of domes, wherein at least one of the combustor domes is configured to operate with a fuel/air mixture equivalence ratio less than one, in combination a water delivery sub-system connected to the gas turbine engine and configured to supply at least one of water and steam to the gas turbine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Specifically, none of none of Schilling et al., Horner et al., Borkowicz et al., Talabisco et al. or Maslak, considered alone or in combination, describe or suggest operating a combustor wherein at least one of water and steam is supplied to the gas turbine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Accordingly, Applicants respectfully submit that Claim 6 is patentable over Schilling et al. in view of either Horner et al. or Borkowicz et al., and further in view of Talabisco et al. or Maslak.

Claims 12 and 13 depend from independent Claim 6. When the recitations of Claims 12 and 13 are considered in combination with the recitations of Claim 6, Applicants submit

that dependent Claims 12 and 13 likewise are patentable over Schilling et al. in view of Horner et al. or Borkowicz et al., and further in view of either Talabisco et al. or Maslak.

Claims 18-20 depend from Claim 14 which recites a gas turbine engine comprising a combustor system comprising a combustor and a water delivery sub-system...said combustor being a lean premix combustor comprising a plurality of domes...at least one of said domes configured to operate with a fuel/air mixture equivalence ratio less than one...said water delivery sub-system configured to supply at least one of water and steam to the gas turbine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody.” None of Horner et al., Borkowicz et al., Talabisco et al. or Maslak, considered alone or in combination,, describe nor suggest a gas turbine engine including a combustor system including a combustor that includes a combustor and a water delivery sub-system, wherein the combustor includes a plurality of domes such that at least one of the domes is configured to operate with a fuel/air mixture equivalence ratio less than one, in combination with a water delivery sub-system configured to supply at least one of water and steam to the gas turbine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. Specifically, none of Horner et al., Borkowicz et al., Talabisco et al. or Maslak, considered alone or in combination, considered alone or in combination, describe or suggest operating a combustor wherein at least one of water and steam is supplied to the gas turbine such that at least one of atomized water and steam is injected into the combustor through an orifice in a fuel/air premixer centerbody within the combustor wherein the orifice extends through the centerbody substantially coincident with a longitudinal axis of the centerbody. For the reasons set forth above, Claim 14 is submitted to be patentable over Schilling et al. in view of either Horner et al. or Borkowicz et al., and further in view of Talabisco et al. or Maslak.

Claims 18-20 depend from independent Claim 14. When the recitations of Claims 18-20 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 18-20 likewise are patentable over Schilling et al. in view of Horner et al. or Borkowicz et al., and further in view of either Talabisco et al. or Maslak.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 5, 12-14, and 18-20 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'R. B. Reeser III', is written over a horizontal line.

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